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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	OFFICIAL
Application No.: 09/869,365	
Filed: 9/25/2001	
Title: Gas Discharge Tube	
Attorney Docket No.: GOTE.P-044	
Customer No.: 021121	
	Group Art Unit: 2879
	Examiner: Karabi Guharay
	Confirmation No: 3983

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

APPLICANTS' INTERVIEW SUMMARY

Dear Sir:

Applicants thank Examiner Guharay for taking the time to meet with their representative. This paper is submitted as a summary of that interview, and to provide the supplemental remarks as requested by the Examiner.

Applicants hereby request an extension of time to run through January 18, 2004, and enclose the fee. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 15-0610.

The first topic discussed at the interview was the declaration of the inventors, the signed copy of which was filed on December 15, 2003. This declaration shows comparative results for gas discharge tubes prepared by two methods: one set (tubes 1-20) that were prepared by simply penciling carbon onto the electrode surface, and one set (tubes 21-40) prepared in accordance with the invention by physical vapor deposition. As is apparent from the results on pages 3 and 4 of the declaration, the performance of the two sets of discharge tubes is very

I hereby certify that this paper and any attachments named herein are transmitted to the United States Patent and Trademark Office, Fax number: (703) 872-9306 on January 13, 2004.

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January 13, 2004
Date of Signature

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Interview Summary Dated: January 13, 2004

different. Thus, it is not reasonable to assume, as the Examiner has done in this case, that the manner in which the carbon is deposited is irrelevant to the physical structure, and that the product-by-process language may therefore be ignored in considering the claims.

The Examiner and Applicants' attorney also discussed the standards for a rejection in a case of a product-by-process claim as defined in the MPEP, § 2113. That section states that "Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product." In the present case, the Examiner has never provided a "rationale" for why the products of the present invention and those of the cited art would be expected to provide the same physical structure. Furthermore, given the evidence in the declaration that the manner of the carbon deposition does matter, Applicants submit that such a rationale is appropriately provided if the rejection is to be maintained.

During the interview, claim 22 and the art cited against that claim was also discussed. Claims 22, 23, 30, 31, 33 and 34 stand rejected over the combination of Haas et al and Culbertson et al. Culbertson is cited for a teaching of carbon layers containing metal, and the Examiner argued that adding metal to the device of Haas would therefore have been obvious. As was pointed out at the interview, this combination of references appears inappropriate when the references are considered in more detail. In particular, the Haas references relates to a method for improving electrode coatings by treating them with a pulsed current. As stated at Col. 1, lines 26 et seq, the purpose of the carbon coating in the Haas electrodes is to "improve device performance by **increasing** electron emission and thereby enhancing plasma discharge in the gap." In contrast, the purpose of the carbon/metal layer in Culbertson is to provide an electrode with less electron emissivity, that is an electrode that is "non-electron emissive." as a result of incorporation of materials that inhibit electron emission. (Col. 1, line 73-Col. 2, lines 5; Col. 4 lines 35-38). It is respectfully submitted that the opposing purposes of the two references renders it impossible to find a suggestion in the art to combine the references as the Examiner has done. Thus, withdrawal of this rejection is respectfully urged.

Respectfully Submitted,


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